



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,499	12/26/2001	Kevin Stanley	284P2US	7863
20577	7590	06/01/2004	EXAMINER	
LONG AND CAMERON SUITE 1401 - 1166 ALBERNI STREET VANCOUVER, BC V6E 3Z3 CANADA			NGUYEN, THU V	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,499

Applicant(s)

STANLEY ET AL.

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 5-7 and 9 is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed on February 27, 2004 has been entered. By this amendment, claim 8 has been canceled, claim 9 has been added and claims 1-7, and 9 are now pending in the application. The amended specification is accepted.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (US 4,754,280).

As per claim 2-4, Brown teaches a self-correcting inertial navigation system including a phase difference triangulation apparatus, a data processor for correcting the inertial position data for drift; employing phase difference information from the phase difference triangulation apparatus to correct the inertial position data for drift (col.1, lines 24-35; col.3, lines 50-52; col.4, lines 19-37, lines 59-68; col.6, lines 10-23; fig.3). Brown does not teach a base station which is responsive to the inertial position data broadcasted by the RF signal, and displaying the corrected display. However, broadcasting RF signals from a mobile device to a base station, and displaying the position data would have been well known. It would have been obvious to a

Art Unit: 3661

person of ordinary skill in the art at the time the invention was made to include a known base station, and a display for displaying the position information to the system of Brown in order to allow the correction data to be calculated from a remote processor to reduce the work load for the processor of the mobile unit, and to allow the user to view the present location he is in.

Allowable Subject Matter

3. Claims 1, 5-7, and 9 are allowed.
4. The following is an examiner's statement of reasons for allowance:

Prior arts of record does not disclose broadcasting the signals generated by the inertial sensor of a mobile unit to remote receivers located at different locations; the phase differences between the inertial signals received at the different locations is determined; the position measured by the inertial sensor is corrected by the calculated phase difference.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed on February 27, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument on page 12, last paragraph, page 14, first two lines, it is admitted that Brown teaches using phase difference triangulation from GPS signals to correct the inertial measurement unit. Brown does not teach using phase difference triangulation of the inertial position measurement signal to correct the inertial position measurement signal itself. However, claims 2 and 4 do not explicitly claim using phase difference triangulation of the inertial position measurement signal for the correction as asserted by the applicant. For example, claim 2, line 7; claim 4, line 7 of the present application just claim that the phase difference triangulation apparatus responsive to "signals", the broad scope of the language "signals" encompasses the GPS signals used in determining phase difference between the received GPS signals of Brown.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Art Unit: 3661

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:


(703) 305-7687 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal
Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The
examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Thomas Black, can be reached on (703) 305-8233. The fax phone number for this
Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Group receptionist whose telephone number is (703) 308-1113.



THU V. NGUYEN
PRIMARY EXAMINER

May 25, 2004